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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/760,027 | 01/12/2001 | Tony M. Brewer | 59182-P015US-1025411 | 1856 |

29053 7590 05/26/2004

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EXAMINER

KADING, JOSHUA A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2661

DATE MAILED: 05/26/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|---|--------------------------------------|--------------------------------------|--|
| <p style="text-align: center;">Office Action Summary</p> | Application No. 09/760,027 | Applicant(s) BREWER ET AL. | |
| | Examiner Joshua Kading | Art Unit 2661 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28 is/are allowed.
- 6) ☒ Claim(s) 1,2,11-13,26 and 27 is/are rejected.
- 7) ☒ -Claim(s) 3-10 and 14-25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2. | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: ____ |
|---|--|

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 3 March 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each
5 publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

10 Claims 2, 21, 24, 25, 26, and 28 are objected to because of the following informalities:

Claim 2, line 2; claim 21, lines 3, 6, and 12; claim 24, lines 4 and 6; claim 25, lines 3, 5, 8, and 21; and claim 26, lines 3, 5, and 7 state "active/standby". Since it is not known if applicant's intended meaning for "active/standby" is "active or standby" or
15 "active and standby", it is suggested that applicant change "active/standby" to either --active or standby-- or --active and standby--.

Claim 21, line 10; and claim 28, line 24 state "healthy/weak". It is not clear if applicant means "healthy or weak" or "healthy and weak". Taken in the context of the claim language, it is suggested that "healthy/weak" be changed to --healthy or weak-- as
20 this makes the most sense.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10 Claim 2, line 2 states "setting and/or clearing" The term "and/or" renders the claim indefinite because it does not distinguish between whether the claim discloses "setting AND clearing" or if it discloses "setting OR clearing" These are two different and distinct possibilities with different implications; therefore the claim is vague and indefinite.

15

Claims 11-13 and 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.

20 Claims 11 and 26 state "after said queues are emptied of all outstanding requests, said ingress ASIC then reissues all previously outstanding requests to said active central arbiter..." It is unclear from the listed method steps how applicant goes from emptying the queues of all requests so that the ASIC and active central arbiter are synchronized in an empty state, to then reissuing the requests? Where do the requests go after they are emptied from the queue and before they are reissued? Are they

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temporarily stored in a memory? Are they sent to some other location? Are messages sent out to the units making the requests to resend them? The method step linking the emptying step and reissuing step is missing and thus renders the claims vague and indefinite.

5 Claims 12, 13, and 27 are also rejected because they depend on claims 11 and 26.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
10 form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

15 (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

20 Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Brewer et al. (U.S. Patent 6,711,357 B1).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome
25 either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Brewer discloses "a method of protection switching of redundant central arbiters in a router system, comprising:

selecting an active central arbiter (col. 4, lines 62-63);

5 selecting a standby central arbiter different from said active central arbiter (col. 5, lines 62-66);

communicating the active status of said active central arbiter; communicating the standby status of said standby central arbiter ((col. 12, lines 37-39 whereby selecting the active CAM and ignoring the standby CAM the status of the CAMs must be known
10 and communicated);

receiving at said active central arbiter requests to pass chunks of data through an optical switching fabric; at said active central arbiter in response to said requests concurrently issuing grants to pass said chunks and issuing optical switch configuration information corresponding to said grants, such that each said chunk passes during a
15 single chunk period (col. 5, lines 27-45);

at said standby central arbiter periodically receiving keep-alive requests; at said standby central arbiter concurrently issuing keep-alive grants and standby configuration information in response to said keep-alive requests (col. 26, lines 55-61 where it is inherent in the standby arbiter that in order to assume control from the active arbiter, all
20 current control, configuration, and data information must be known to both arbiters at the time of "take over", this means that the standby arbiter must be operational at the

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same time as the active arbiter so that in case of failure it can assume control immediately); and

interchanging said active and standby status of said respective active and standby central arbiters, such that said standby central arbiter becomes a new active
5 central arbiter and said active central arbiter becomes a new standby central arbiter (col. 26, lines 55-61)."

Allowable Subject Matter

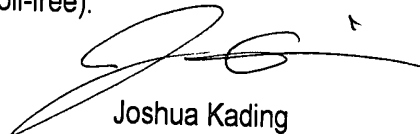
Claims 3-10 and 14-25 are objected to as being dependent upon a rejected base
10 claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 28 is allowable because the prior art of record fails to teach, in
15 combination with other claim limitations, "...a plurality of control processors including a master control processor and distributed control processors, said control processors being interconnected with one another and with said redundant central arbiters through a control network...said ingress ASICs and said optical switch ASICs being configured to cooperatively determine a healthy/weak state of each of respective first through
20 fourth multiple links and said active and standby status of said respective redundant central arbiters."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

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May 17, 2004



KENNETH VANDERFUYE
PRIMARY EXAMINER